[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS RTTY CAST928

This is the Australian National Amateur Radio Teleprinter Society
with our weekly RTTY broadcast. We transmit on the following times
and frequencies :

```
  3.545 MHz (Plus/minus 5)   0930 UTC     VK2CTD (COL
  7.045 MHz  -3              0030 UTC     VK2CTD (COL)
 14.070 MHz (amtor/fec)      0030 UTC     VK2DPM (ALAN)
 14.091 MHz                  0030 UTC     VK2DPM (ALAN
146.675 MHz             0030/0930 UTC     VK2JPA (PAT)
144.850 MHz (ax25 bbs)                    VK2JPA AT VK2WI
146.675 MHz (rtty mmbbs/repeater)         VK2RTY
```

INTERNET RADIO-INFO-DIST AT UCSD.EDU

CONTEST REMINDER

JUST A NOTE TO REMIND YOU THAT THE CQ/DJ WW DIGITAL CONTEST IS
BEING HELD THIS WEEK.

COLS COLUMN.

PAT VK2JPA IS ON HOLIDAY THIS WEEK, SO I HAVE BEEN GIVEN THE
HONOUR OF COMPILING THE BROADCAST. THE PROPAGATION ON 40 METRES
IS STILL NO BETTER, WHICH IS VERY DISAPPOINTING. AT THE MOMENT
3 OR 4 CALLBACKS IS ALL THAT I AM GETTING. HOWEVER, JOY OF
JOYS THE 80 METRE CAST ON SUNDAY EVENINGS IS DOING MUCH BETTER,
QUITE A FEW STATIONS TAKING PART. THE REGULAR ONES BEING JIM
VK2BQS JOHN VK2BAT VICTOR VK3BVJ AND DAVID VK7KDM, WITH OTHERS
AT VARIOUS TIMES. THKS TO ALL THOSE STATIONS FOR MAKING SUNDAY
EVENINGS A SUCCESS. THE OTHER DAY I DOWNLOADED THE ARRL SOLAR
REPORT, IT CONTAINS INFORMATION REFERENCE THE SUNSPOT ACTIVITY
AND I INCLUDE IT IN THIS CAST.
LAST WEEK I SAID THAT MORE EARLY COMMUNICATIONS WOULD APPEAR IN
THIS WEEKS COLUMN.
TO THIS DATE, I HAVE BEEN DEALING WITH SYSTEMS THAT UTILISED
STATIC ELECTRICITY, WE NOW MOVE ON TO THE GALVANIC TELEGRAPH,
THAT IS A SYSTEM USING AN ELECTRIC CURRENT, A FLOW OF
ELECTRICITY THAT WOLD LAST FOR AN APPRECIABLE TIME RATHER THAN
A MOMENTARY DISCHARGE THAT COULD BE OBTAINED FROM A LEYDEN JAR
(EARLY CAPACITOR). BEFORE DESCRIBING ONE OF THESE SYSTEMS, I
WOULD LIKE TO WRITE A SHORT NOTE ON THE EARLY 'BATTERIES' THAT
PROVIDED THE POWER FOR THESE SYSTEMS. THE FIRST GALVANIC
TELEGRAPH WILL APPEAR NEXT WEEK. THERE ARE THREE NECESSARY
COMPONENTS IN A SUCCESSFUL TELEGRAPH SYSTEM. A TRANSMITTING
DEVICE, A MEDIUM PROPAGATING THE SIGNAL AND A RECEIVING DEVICE.
ELECTROSTATIC SYSTEMS FAILED IN EACH OF THESE COMPONENTS.
FRICTIONAL MACHINES PRODUCE TINY CHARGES OF ELECTRICITY AT VERY
HIGH POTENTIALS. UNLESS THERE IS GOOD INSULATION, THE CHARGE
LEAKS RAPIDLY AWAY TO EARTH. IN THE FIRST TWENTY YEARS OF THE
19TH CENTURY, TWO ADVANCES IN ELECTRICITY GAVE EXPERIMENTS A
MORE RELIABLE SOURCE AMD THE TELEGRAPH WAS TRANSFORMED INTO A
USEFUL DEVICE, RATHER THAN A SCIENTIFIC TOY.
THE FIRST ADVANCE WAS THE SUBJECT OF A LETTER TO THE ROYAL
SOCIETY IN 1800, IT WAS FROM VOLTA. HE DISCRIBES HIS FAMOUS

'PILE' FROM WHICH A FLOW OF ELECTRICITY LASTED FOR A CONSIDERABLE TIME. VOLTA WAS INSPIRED BY GALVANI'S WORK ON THE MUSCULAR MOVEMENTS OF FROGS. AS WELL MAKING A FROGS LEG MOVE BY A FRICTIONAL MACHINE, GALVANI NOTICED THE LEG WOULD ALSO MOVE WHEN TOUCHED BY SPIKES OF DIFFERENT METALS, SUCH AS COPPER AND IRON. HE CONCLUDED THAT THESE PHENOMENA WERE CAUSED BY 'ANIMAL ELECTRICITY'. VOLTA SHOWED THAT THE PRIMARY CAUSE WAS A SOURCE OF ENERGY AT THE JUNCTION OF DISSIMILAR METALS. IN ORDER TO DEMONSTRATE THIS CLEARLY, VOLTA BUILT UP A PILE OF METAL DISCS. HE LAID A SILVER DISC ON THE TABLE, THEN A ZINC DISC ONE ON TOP OF IT. EACH DISC WAS ABOUT 2 AND A HALF CENTIMETRE IN DIAMETER. OVER THIS HE LAID A DISC OF CARBOARD SOAKED IN WATER OR BRINE. HE CONTINUED THE PROCESS OF LAYING THESE THREE DISCS ON TOP OF EACH OTHER. THE ZINC AND SILVER DISCS IN CONTACT WITH EACH OTHER PROVIDED A CONTINUOUS FLOW OF ELECTRICITY. THIS WAS THE FIRST BATTERY MADING POSSIBLE A WHOLE NEW SERIES OF EXPERIMENTS IN THE INVESTIGATION OF CHEMICAL, HEATING, MAGNETIC AND OF COURSE TELEGRAPHS ETC. ELECTRICAL RESEARCH NOW MOVED FORWARD AT A GREATER PACE.
THE SECOND ADVANCE IN KNOWLEDGE WAS THE DISCOVERY BY OERSTED IN 1820, THAT WHEN A WIRE CARRIES A CURRENT OF ELECTRICITY IT EXERTS A TURNING EFFECT UPON A COMPASS NEEDLE PLACED CLOSE TO AND PARRALLEL TO IT. IT LINKED THE TWO SUBJECTS, MAGNETISM AND ELECTRICITY. IT SHOWED THAT ELECTIC CURRENTS COULD EXERT MECHANICAL FORCE, THUS LAYING THE FOUNDATIONS OF ELECTRICAL ENGINEERING.
THE IMMEDIATE EFFECT ON THE DEVELOPMENT OF THE TELEGRAPH WAS TO PROVIDE, IN THE FORM OF NOTHING MORE COMPLICATED THAN A DEFLECTED COMPASS NEEDLE AS AN INDICATOR OF ELECTRIC CURRENT. AMPERE SUGGESTED A TELEGRAPH USING THIS TECHNIQUE, BUT NEVER BUILT ONE.
NEXT WEEK I SHALL ATTEMPT TO DESCRIBE ONE OF THE EARLY SYSTEMS USING A VOLTAIC PILE, UNTIL THEN 73'S DE COL

IONOSPHERIC REPORT AND FORECAST.

I AM UNABLE TO BRING YOU THE REPORT FROM THE I.P.S. THIS WEEK HOWEVER AS STATED ABOVE I HAVE THE ARRL SOLAR REPORT IN ITS PLACE.

QST de W1AW
Propagation Forecast Bulletin 39 ARLP039
>From Tad Cook, KT7H
Seattle, WA September 20, 1996
To all radio amateurs

SB PROP ARL ARLP039
ARLP039 Propagation de KT7H

Solar activity was down again last week. Average Solar Flux was down about a point, and average sunspot numbers were down about 3.7. Every day except September 12 had no visible sunspots.

The daily solar flux was below the 90 day average of 71 on each day over the past week.

Solar activity is expected to increase over this week, with solar flux to peak in the mid 70s around September 24 to 16.

Geomagnetic conditions are expected to peak around September 25
with A indices around 25 and K indices as high as 5.
After October 1 solar flux should drop below 70. Geomagnetic
conditions should get unstable again around October 7 to 13.

The days are growing shorter, and the Fall Equinox will arrive
September 22. Because of less daylight 20 meters is becoming
more of a daylight band.

Sunspot Numbers for September 12 through 18 were 11, 0, 0, 0, 0,
0 and 0, with a mean of 1.6. 10.7 cm flux was 67.8, 67.3, 67.1,
66.4, 68, 69, and 68.9, with a mean of 67.8.

VK2SG RTTY DX NOTES FOR WEEK ENDING SEPT. 20, 1996

Our thanks this week go to: ZS5S, W2JGR, WB2CJL, W5KSI, AA5AU,
DF2KU, DJ2TI, PA0HVF, IK2MRZ, I4MKN, IK1HSR, IK1CJO, IK1QBT,
I5IGQ, I1JQJ, and the 425 DXgang, DJ3IW and the Central Europe
DX Cluster B0SPC, the NJ0M Node of Minnesota, and the IK5PWJ
Cluster.

BANDPASS:
Friday 13
1148-14085 J53KX
1250-14085 UN7GY
1255-14085 5B4/SM0TGG
1336-14086 XT2DP
1608-14081 3V8BB QSL via DK9IP
1751-14088 IS0MVE
1846-14081 5H3LM
1929-14081 CN8MM
1952-14083 HK1LAQ
2029-14083 XT2DP
2031-14082 IS0QDV
2217-14085 VR6MW

Saturday 14
0818-14089 TA2IO
0956-14083 IH9DX IOTA AF-018
0958-14085 OY4TN
1308-14085 WP4Q
1332-14087 4L1BR
1649-14083 EK6OCM
1645-14084 XT2DP
2036-14081 T0OU P. Seborga QSL via DL7CM
2051-14085 5X1T QSL via ON5NT
2056-14085 HK3SGP
2245-14085 PJ2MI

Sunday 15
0752-14085 IQ7CIA Pfx Spl Call MARCONI DAYS
0834-14091 RA2FB
0956-14082 TA2IO
1142-14086 OY4TN
1200-14083 JW2EGA QSL via LA2EGA
1205-14084 LA5QIA IOTA EU-036
1208-14083 OD5SK
1306-14090 EW8OS
1322-14082 HL2XL

1502-14090 5X1T
1640-14085 TT8SP
1837-14084 4X6UO
1841-14083 HK3SGP
2047-14083 HC6IM
2134-14082 YV4CEA

Monday 16
0003-14083 HK3SGP
0659-14087 ZL2GFR
1739-14087 J53KX
1924-14081 5B4/SM0TGG
1930-14084 LA5QIA
2328-14080 VR6MW
2340-14086 OA4BR
2349-14080 XE1CI

Tuesday 17
0034-14082 LU5VC
1203-14085 IA1WER
1207-14084 PJ2MI
1402-14087 RZ3AZ
1625-14082 A92GE
1625-14083 5B4/SM0TGG
1757-14088 GM4ZOA
2009-14083 IS0QDV

Wednesday 18
0316-14083 ZL1HY
1910-14087 5H3LM

Thursday 19
1240-14085 9K2HN
1303-14088 TA2IO
1642-14086 J59KX QSL via DF3KX
1748-14087 EA6RA
1817-14087 XT2DP
Notes of Interest:

5R, MADAGASCAR - For those still needing this one look for Gerard, 5R8EN who will stay there until the middle of October.

ANGOLA, D2 - Alex, PA3DZN states to be active in early October from Luanda for a period of 6 months. Operation will be CW, CW, CW, RTTY, and SSB.

SPECIAL PFX, IY1EY - During the 'LOANO ELETTRA AWARD' to celebrate Marconi's radioelectric experiments on the Elettra ship from 1919 to 1936 on Ligurian Sea, will be on from the 21st to the 29th Septmeber the special prefix IY1EY. Activity on all modes CW/SSB/RTTY all bands. A special QSL card reproducing Marconi's legednary boat 'Elettra' will be issued via IK1QBT, Tony.

The VK2SG RTTY DXNOTES are also available on Internet at reflector digital-dx(at)st.rim.or.jp and the OH2BUA Webcluster at URL http://www.clinet.fi/jukka/webcluster.html.

For next week's bulletin send your bandpass and notes oF interest to Bob, WB2CJL(at)W5KSI.(hash-sign)NOLA.LA.USA.NA .

GL de (DX2) Luciano, I5FLN(at)ZS5S.ZAF.AF .

ARRL DXNOTES

>From ARRL Headquarters
Newington CT September 19, 1996
To all radio amateurs

ARLD043 DX news

This week's bulletin was made possible with info provided by Ted, KB8NW, the OPDX Bulletin, 425 DX News, Martti, OH2BH, and Contest Corral from QST. Thanks to all.

MADAGASCAR, 5R. Jean Michel, F6AJA, is in France after his 5R8FI operation and will have QSL cards printed soon. Jean has the 5R8EN logs up to September 7th, with the 5R8EN/P logs from Nosy Be, and is preparing a short 5R8EN/P story. look for Gerard, 5R8EN, on RTTY until mid October.

UGANDA, 5X. Peter, 5X1T, aka ON6TT, reports he has some windows to work Europe on the RS-12 satellite, between 1900-2000z, for the next couple of days.

ANGOLA, D2. Alex, PA3DZN, expects to be active in early October from Luanda for a minimum of 6 months. He plans to use his TS-50 and R7 on 10 - 40 meters, but a Force-12 C4 beam and a 600W amplifier will be shipped to Luanda as well. For 80 and 160 meters, he will try to install the usual wire antennas. Operation will be on CW, RTTY, and SSB. QSL information ''TO BE ANNOUNCED.''

GUINEA BISSAU, J5. Hans, DK9KX, and Dieter, DJ9ON, members of the Cologne DX Group, are active on 80 to 10 meters, as J59KX and J59ON, respectively. This DXpedition is also joined by Anne, DF3KX. Anne uses a 100 watt transceiver and a R-7000 vertical. Operations will be mostly CW, with SSB and RTTY as well. QSL via home calls.

KH7 CONFUSION. Lee, KH6BZF, reminds amateurs that the FCC has started issuing KH7 licenses to Hawaiian Amateurs. KH7 callsigns have been appearing on the bands in the last week or so. These are NOT Kure Island callsigns.

MYANMAR, XZ. In preparation for the official opening of the Visit Myanmar Year 1996 and the large scale XZ1N amateur radio operation in November, Martti, OH2BH, will be visiting Myanmar on September 21 and 22.

Station XZ2BH will be sporadically on the air on several bands, including the Scandinavian Activity Contest. Equipment includes a Yaesu FT1000MP and the Alpha 89 amplifier.

QSL INFORMATION AND NEWS.

There has been a QSL Manager change in the upcoming ZV0MB and ZV0MV DXpedition. PT2DX was announced earlier as manager, but his address is not in the current callbook. PT2GTI was announced as QSL Manager for the Martim Vaz Island DXpedition. QSLs go to PO Box 09647, BRASILIA, DF, 70001-970.

The Danish QSL Bureau has changed their address to : EDR QSL

BUREAU, Klokkestoebervej 11, DK 5230 Odense M., Denmark.

ISLANDS ON THE AIR (IOTA)

FOR THOSE STATIONS INTERESTED IN IOTA, HERE ARE A COUPLE OF
IOTA DX SNIPPETS.

>From: Kenneth McCormick <mccormick(AT)ns.sympatico.ca>
>Subject: CY9AOE St.Paul Isl.

As of Tues, Sept 17 the planned Dxpedition to St.PauL Isl.(CY9) is still in the works. We had planned on leaving today and landing on Weds but due to the recent hurricane activity on the east coast of North America, it has been impossible to land on the island because of high seas. If the wx should cooperate we will leave on Weds, Sept 25 by boat and be on the air that evening or the following day. The call for this operation will be CY9AOE and QSL to VE1AOE. Hope to hear you from St. Paul Island. Don VE1AOE and Ken VY2RU (VE1RU).

>From SV1CID(AT)SV1AFA.AGR.GRC.EU

Subject : Insua Island EU-150 DX'pedition.

The Insua Island IOTA EU-150 1996 DX'pedition Story and Photos are now available on the WEB on the next sites:

http://www-dx.deis.unibo.it/htdx/index.html
and
http://www.hamradio-online.com

73 and CU on the next DX'pedition, Jose CT1EEB

COMING EVENTS

SEPTEMBER	28TH-29TH	CQ/DJ WW DIGITAL
OCTOBER	19TH-20TH	JARTS WW RTTY

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President (Col) VK2CTD at VKWI2, or the Secretary (Pat) VK2JPA at VK2WI.

News items may be sent to Broadcast Officer PO Box 60 Blacktown 2148 Australia, or fax to (02) 9672-3392, or by packet to VK2JPA at VK2WI.

Email address for the Broadcast Officer is :

patl(at)pitt.conmusic.su.oz.au

or patl(at)extro.ucc.su.oz.au

73s De Col VK2CTD Acting Broadcast Officer

--
Dave Horsfall (VK2KFU) | dave@esi.com.au | VK2KFU @ VK2KFU.NSW.AUS.OC | PGP 2.6
Opinions expressed are mine. | D8 15 71 F9 26 C8 63 40 5E 63 5C 65 FC A0 22 99